

2634  
8-30-02  
Attachment

UCT-0012-P



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Timothy Hla et al. )  
Serial No.: 09/945,353 ) Group Art Unit: 2634  
Filed: 8/31/01 ) Before the Examiner:  
For: METHOD FOR REGULATING )  
ANGIOGENESIS )

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §§ 1.56, 1.97 AND 1.98

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

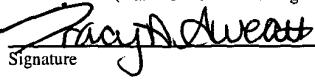
In compliance with the duty to disclose, applicants submit herewith copies of publications of which those designated in 37 CFR § 1.56 are aware which the Examiner may consider material. Moreover, applicants direct the Examiner's attention to parent application USSN 09/651,846 filed on August 31, 2000, from which this application claims priority, wherein further prior art is of record. Pursuant to 37 CFR § 1.98 (d) copies of this previously submitted or cited prior art are not included. All of the publications being disclosed are listed on attached form PTO-1449.

RECEIVED  
MAR 27 2002  
Technology Center 2600

I certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on

March 13, 2002  
(Date of Deposit)

Tracy A. Sweatt  
(Name of Person Mailing Paper)

  
Signature

3/13/02  
Date

Consideration of this Information Disclosure Statement is respectfully requested, since the Examiner may consider the information provided herein material to the patentability of the subject application as defined in 37 CFR § 1.56.

Since this Information Disclosure Statement is being filed more than three months from the filing date of the subject application but before the mailing date of a first Office Action on the merits, no fee or certification under 37 CFR § 1.97 (e) is required.

However, in the event the Commissioner of Patents deems that any fee is required under 37 CFR §§ 1.16 and 1.17 in connection with this application, applicant's attorneys authorize that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

Timothy Hla et al.

CANTOR COLBURN LLP  
Applicant's Attorneys

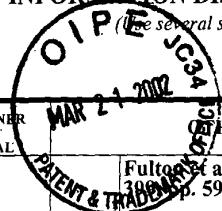
By:

  
Leah M. Reimer  
Registration No. 39,341  
Customer No. 23413

Date: March 13, 2002  
Address: 55 Griffin Road South, Bloomfield, Connecticut 06002  
Telephone: (860) 286-2929

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)



Docket Number (Optional)	UCT-0012-P	Application Number
		09/945,353
Applicant(s)	Timothy Hla et al.	
Filing Date	8/31/01	Group Art Unit 2634

\*EXAMINER  
INITIAL

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Fulton et al., "Regulation of endothelium-derived nitric oxide production by the protein kinase Akt", Letters to Nature., Vol. 380, pp. 597-601 (1999) ✓

Paik et al., "Sphingosine 1-Phosphate-induced Endothelial Cell Migration Requires the Expression of EDG-1 and EDG-3 Receptors and Rho-dependent Activation of xVB3-and B1-Containing Integrins", J. Biol. Chem., Vol. 276 No. 15, 11830-11837 (April 13, 2001) ✓

Lee, Meng-Jer et al., "Vascular Endothelial Cell Adherens Junction Assembly and Morphogenesis Induced by Sphingosine-1-Phosphate", Cell, Vol. 99, 301-312 (October 29, 1999)

Lee, Meng-Jer et al., "Akt-Mediated Phosphorylation of the G protein-Coupled Receptor EDG-1 Is Required for Endothelial Cell Chemotaxis" Molecular Cell, Vol. 8, 1-20 (September, 2001) ✓

RECEIVED

MAR 27 2002

Technology Center 2600

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE CITATION</b> <i>(Use several sheets if necessary)</i>		Docket Number (Optional) <b>UCT-0012-P</b>	Application Number <b>09/945,353</b>
		Applicant(s) <b>Timothy Hla et al.</b>	
*EXAMINER <b>MAR 21 2002</b> INITIAL		Filing Date <b>8/31/2001</b>	Group Art Unit <b>2634</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
Andrea D. Branch, A good antisense molecule is hard to find, TIBS 23- February 1998, pp. 45-50			
RECEIVED <b>MAR 27 2002</b> Technology Center 2600			
W. Michael Flanagan et al., Cellular penetration and antisense activity by a phenoxyazine-substituted heptapeptide, RESEARCH			
Edward J. Goetzl et al., Lysophospholipid Enhancement of Human T Cell Sensitivity to Diphtheria Toxin by Increased Expression of Heparin-Binding Epidermal Growth Factor, ASSOCIATION OF AMERICAN PHYSICIANS, Vol. 111, No. 3 pp. 259-269			
Edward J. Goetzl et al., Lysophosphatidic Acid and Sphingosine 1- Phosphate Protection of T Cells from Apoptosis in Association with Suppression of Bax1			
Ackermann, Elizabeth J., "The Role of Antiapoptotic Bcl-2 Family Members in endothelial Apoptosis Elucidated with Antisense Oligonucleotides", J. Biol. Chem., Vol. 274, No. 16, 11245-11252, April 16, 1999			
Macrez-Lepretre, Nathalie et al., "G Protein Heterotrimer Gal13Bly3 Couples the Angiotensin AT1a Receptor to Increases in Cytoplasmic Ca2+in Rat Portal Vein Myocytes, J. Biol. Chem., Vol. 272, No. 15, 10095-10102, April 11, 1997			
Lee, Menq-Jer, et al. "Vascular Endothelial Cell Adherens Junction Assembly and Morphogenesis Induced by Sphingosine-1-Phosphate", Cell, Vol. 99 301-312, Oct. 29, 1999			
Hla et al., "An Abundant Transcript Induced in Differentiating Human Endothelial Cells Encodes a Polypeptide with Structural Similarities to G-protein-coupled Receptors" J. Biol. Chem., Vol. 265, No. 16, pp. 9308-9313, June 5, 1990			
Zhang, et al., "Comparative analysis of three murine G-protein coupled receptors activated by sphingosine-1-phosphate" Gene 227, pp. 89-99 (1999)			
Lee, Menq-Jer et al., "Lysophosphatidic Acid Stimulates the G-protein-coupled Receptor EDg-1 as a Low Affinity Agonist" J. Biol. Chem., Vol. 273, No. 34, pp. 22105-22112, August 21, 1998			
Alessi et al., "Molecular basis for the substrate specificity of protein kinase B; comparision with MAPKAP kinase-1 and p70 S6 kinase", FEBS Letters 399 pp. 333-3389 October 31, 1996			
Stokoe, et al. "MAPKAP kinase-2; a novel protein kinase activated by mitogen-activated protein kinase" The EMBO Journal, Vol. 11, No. 11, pp. 3985-3994 (1992)			
EXAMINER		DATE CONSIDERED	

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

MAR 21 2002

ATTY DOCKET NO.  
UCT-0012-PSERIAL NO.  
09/945,353

Timothy Hla et al.

FILING

8/31/01

GROUP

2634

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	3,472,931	1/17/69	Stoughton			
	3,891,757	1/24/75	Higuchi			
	5,411,947	5/2/95	Hostetler et al.			
	5,681,940	10/28/97	Wang et al.			
	5,912,144	6/15/99	Au-Young et al.			
	6,025,331	2/15/00	Moses et al.			
	6,100,071	8/8/00	Davis-Smyth et al.			
	5,951,455	9/99	Cowser			
	5,801,154	9/98	Baracchini et al.			
	5,851,999	12/22/98	Ullrich et al.			

RECEIVED

MAR 27 2002

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 99/19513	10/97	PCT				
	1,464,975	3/8/74	Great Britain				
	1,001,949	7/19/62	Great Britain				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		O'Reilly, Michael S., et al. "Angiostatin: A Novel Angiogenesis Inhibitor That Mediates the Suppression of Metastases by a Lewis Lung Carcinoma", Cell, Vol. 79, 315-328, 10/21/94
		Folkman, Judah, "Angiogenesis in cancer, vascular, rheumatoid and other disease", Nature Medicine, Vol. 1 Number 1, 27-30, 1995

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)

Docket Number (Optional)

UCT-0012 -P

Application Number

09/945, 353

Applicant(s)

Timothy Hla, et al

Filing Date

8/31/01

Group Art Unit

2634

\*EXAMINER  
INITIALS

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Ku Mola, Stephen, et al, "Exploring the Scientific Basis of Surgery: Transmyocardial Revascularization", J. Formos Med Assoc., Vol. 98, No. 5, 301-308, 1999

An, Songzhu, et al, "Identification of cDNAs encoding two G protein-coupled receptors for lysosphingolipids", FEBS Letters 417 (1997) 279-282

Lee, Menq-Jer, et al, "Sphingosine-1-Phosphate as a Ligand for the G Protein-Coupled Receptor EDG-1", Science, Vol. 279, 1552-1555, March 6, 1998

Ancellin, Nicolas, et al, "Differential Pharmacological Properties and Signal Transduction of the Sphingosine 1-Phosphate Receptors EDG-1, EDG-3, and EDG-5", J. Biol. Chem., Vol. 274, No. 27, 18997-19002, (July 2, 1999)

RECEIVED

Zhang, Guangfa, et al, "Comparative analysis of three murine G-protein coupled receptors activated by sphingosine-1-phosphate", Gene 227 (1999) 89-99

MAR 27 2002

Technology Center 2600

Lee, Menq-Jer, et al, "Lysophosphatidic Acid Stimulates the G-protein-coupled Receptor EDG-1 as Low Affinity Agonist", J. Biol. Chem., Vol. 273, No. 34, 22105-22112, August 21, 1998

Volpi, Mario, et al, "Intracellular Elevations of Free Calcium Induced by Activation of Histamine H1 Receptors in Interphase and Mitotic HeLa Cells: Hormone Signal Transduction is Altered during Mitosis", J. Cell Biol., Vol. 107, No. 6, Pt. 2, 2533-2539, Dec. 1988

Ridley, Anne J., et al, "The Small GTP-Binding Protein rac Regulates Growth Factor-Induced Membrane Ruffling", Cell, Vol. 70, 401-410, August 7, 1992

Hinck, Lindsay, et al, "Dynamics of Cadherin/Catenin Complex Formation: Novel Protein Interactions and Pathways of Complex Assembly", J. Cell Biol., Vol. 125, No. 6, 1327-1340, June 1994

Liu, Catherine H., et al, "Ligand-induced Trafficking of the Sphingosine-1-phosphate Receptor EDG-1", Molecular Biology of the Cell, Vol. 10, 1179-1190, April 1999

Kinsella, J. L., et al, "Protein Kinase C Regulates Endothelial Cell Tube Formation on Basement Membrane Matrix, Matrigel", Experimental Cell Research 199, 56-62 (1992)

Gamble, Jennifer R., et al, "Regulation of In Vitro Capillary Tube Formation by Anti-Integrin Antibodies", J. Cell Biol., Vol. 121, No. 4, 931-943, May 1993

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.